

TROPICAL STORM RUTH (30W)

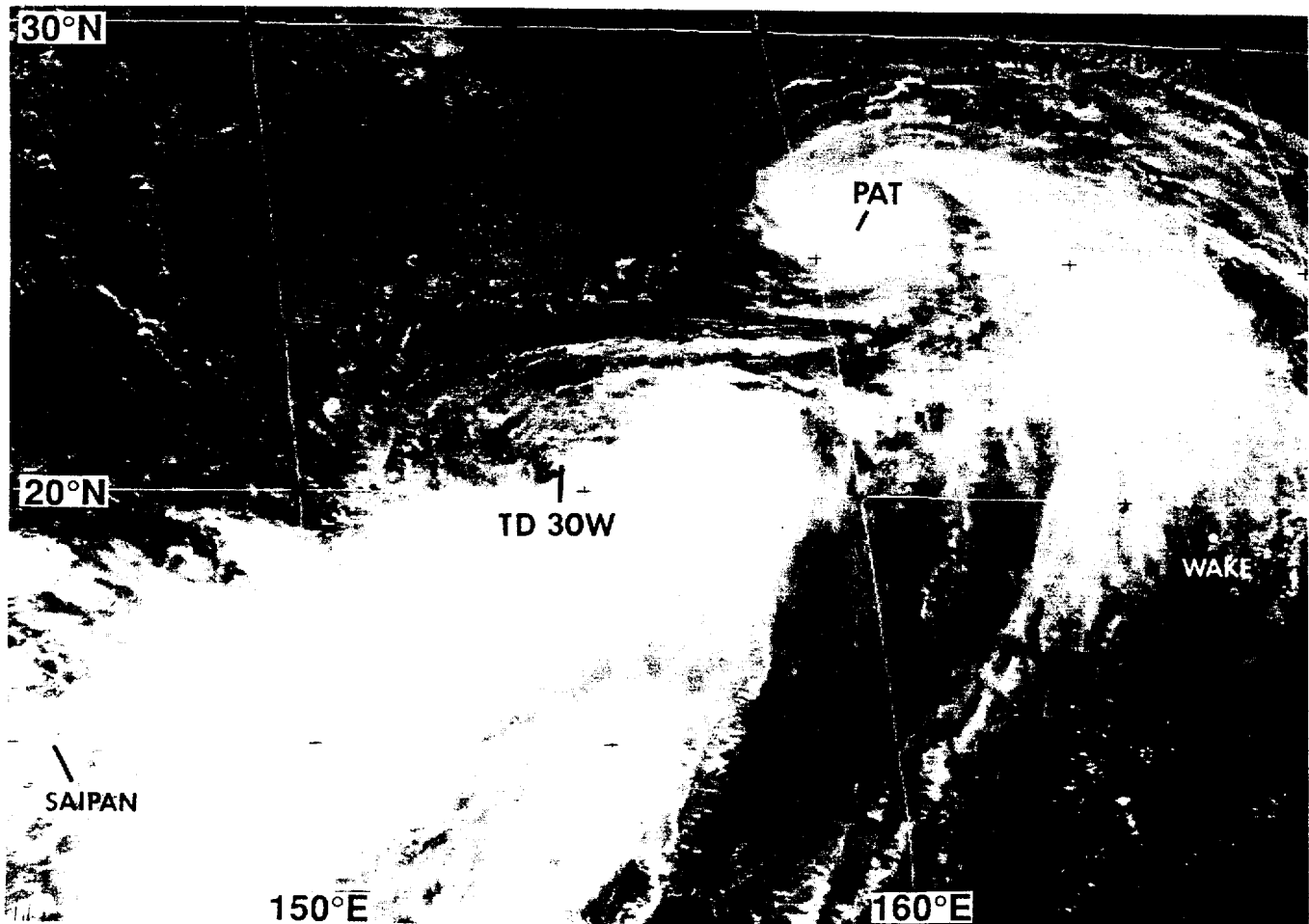


Figure 3-30-1 Cyclonically curved lines of deep convection and low-level cloud lines indicate that the tropical disturbance, which later became Tropical Storm Ruth, was intensifying (240131Z September visible GMS imagery).

I. HIGHLIGHTS

The symmetrical collapse of deep convection during the merger of Ruth with Pat (29W) is the first documented case of such an event (Lander 1995b). Ruth exhibited unusual motion: a north-oriented “S”-shaped track.

II. TRACK AND INTENSITY

Based on 24 hours of persistence, an area of deep convection (located along the axis of a reverse-oriented monsoon trough) was first identified as a tropical disturbance on the 230600Z September Significant Tropical Weather Advisory. Increased cyclonic curvature of the convective cloud bands in this tropical disturbance prompted the JTWC to issue a Tropical Cyclone Formation Alert at

231800Z. Continued improvement in the organization of the deep convection and the presence of well-defined, cyclonically curved, low-level cloud lines during the daylight hours of 24 September (Figure 3-30-1) led to the first warning on Tropical Depression 30W at 240600Z. The system was upgraded to Tropical Storm Ruth at 250600Z. Ruth initially moved northeastward under the steering influence of deep southwesterly monsoonal flow. As it moved northeastward, the separation distance between Ruth and Pat (29W) steadily decreased and a binary interaction ensued. The binary interaction culminated in merger, and at 261200Z, Ruth and Pat (29W) became one vortex. The merged Ruth and Pat (29W) then recurved and the final warning was issued at 281200Z.

III. DISCUSSION

For a complete discussion of the first documented case of the symmetrical collapse of the deep convection of both tropical cyclones during merger, see the discussion section in the summary of Typhoon Pat (29W).

IV. IMPACT

No reports of significant damage or fatalities were received.